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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/836,753	04/17/2001	Bobby J. Self	10003797-1	7380

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AGILENT TECHNOLOGIES, INC.
Legal Department, 51U-PD
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EXAMINER

LEON, EDWIN A

ART UNIT PAPER NUMBER

2833

DATE MAILED: 01/30/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/836,753

Applicant(s)

SELF ET AL.

Examiner

Edwin A. León

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-7 and 9-15 are rejected under 35 U.S.C. 102(b) as being anticipated by Kao (U.S. Patent No. 6,017,222). With regard to Claim 1, Kao discloses an electrical connection structure for terminating an electrical signal wire (7) and electrically coupling the electrical signal wire (7) to a target circuit board (30), comprising: an electrical circuit substrate (40) to which the electrical signal wire (7) is coupled, the electrical circuit substrate (40) having a proximate end being coupled via solder to the target circuit board (30), the electrical circuit substrate (40) being substantially perpendicular to the target circuit board (30); and a termination circuit (43) mounted substantially at the proximate end of the electrical circuit substrate (40), the termination circuit (43) being electrically coupled to the electrical signal wire (7) and the target circuit board (30). See Figs. 3-8 and Column 2, Lines 50-60.

With regard to Claim 2, Kao discloses the electrical circuit substrate (40) being a rigid circuit board (40). See Figs. 3-8 and Column 2, Lines 50-60.

With regard to Claim 3, Kao discloses a guide pin (711) connected to the rigid circuit board (40), the guide pin (711) protruding through a corresponding alignment hole in the target circuit board (30). See Figs. 3-8 and Column 2, Lines 50-60.

With regard to Claim 4, Kao discloses the termination circuit (43) comprising at least two stacked passive electrical surface-mount components. See Figs. 3-8 and Column 2, Lines 50-60.

With regard to Claim 5, Kao discloses the termination circuit (43) comprises an active electrical component. See Figs. 3-8 and Column 2, Lines 50-60.

With regard to Claim 6, Kao discloses at least one electrical signal wire (7) may be connected to either side of the rigid circuit board (40). See Figs. 3-8 and Column 2, Lines 50-60.

With regard to Claim 7, Kao discloses the electrical signal wire (7) being a coaxial signal wire having a shield electrically coupled to the rigid circuit board (40). See Figs. 3-8 and Column 2, Lines 50-60.

With regard to Claim 9, Kao discloses the electrical circuit substrate (40) being a flex circuit (40). See Figs. 3-8 and Column 2, Lines 50-60.

With regard to Claim 10, Kao discloses a rigid board attached alongside the flex circuit (40) at the proximate end opposite the side of the flex circuit (40) where the termination circuit (43) is mounted. See Figs. 3-8 and Column 2, Lines 50-60.

With regard to Claim 11, Kao discloses a socket (43) connected to the flex circuit (40), the socket (43) being capable of receiving a mating plug (31) to which the electrical signal wire (7) is connected. See Figs. 3-8 and Column 2, Lines 50-60.

With regard to Claim 12, Kao discloses a guide pin (711) connected to the flex circuit (40), the guide pin (711) protruding through a corresponding alignment hole in the target circuit board (30). See Figs. 3-8 and Column 2, Lines 50-60.

With regard to Claim 13, Kao discloses the termination circuit (43) comprising at least two stacked passive electrical surface-mount components. See Figs. 3-8 and Column 2, Lines 50-60.

With regard to Claim 14, Kao discloses the termination circuit (43) comprising an active electrical component. See Figs. 3-8 and Column 2, Lines 50-60.

With regard to Claim 15, Kao discloses the flex circuit (40) being a rigidized flex circuit (40). See Figs. 3-8 and Column 2, Lines 50-60.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kao (U.S. Patent No. 6,017,222) in view of Applicant's admitted prior art. Kao discloses the claimed invention except for a protective cover that at least partially encloses the rigid circuit board (40).

Applicant's admitted prior art discloses a connection structure having a protective cover (130) that encloses a rigid circuit board (40). See Figs. 1-2.

Thus, it would have been obvious to one with ordinary skill in the art to modify the connector of Kao by including a protective cover as taught in Applicant's admitted prior art to protect the circuit board and the connections against possible damage.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Nagahata et al. (U.S. Patent No. 6,238,237), Smith (U.S. Patent No. 4,812,135), Hudson, Jr. (U.S. Patent No. 4,087,146), Wu (U.S. Patent No. 6,162,099), Webster et al. (U.S. Patent No. 5,692,911), Pistor (U.S. Patent No. 4,609,240), Yatskov et al. (U.S. Patent No. 6,302,705), Wolfe (U.S. Patent No. 6,309,223), Yatskov et al. (U.S. Patent No. 6,336,816), Carter (U.S. Patent No. 3,707,696), Tanaka et al. (U.S. Patent No. 6,247,977), Nagai et al. (U.S. Patent No. 6,305,970), Hayashi et al. (U.S. Patent No. 6,139,360), Mizumo (U.S. Patent No. 5,764,497), Aggus et al. (U.S. Patent No. 6,053,747), and Klein et al. (U.S. Patent No. 4,934,943) disclose connection structures having circuit substrates, electrical wires and termination circuits.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Edwin A. León whose telephone number is (703) 308-6253. The examiner can normally be reached on Monday - Friday 9:00-5:30.


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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paula A. Bradley can be reached on (703) 308-2319. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7722 for regular communications and (703) 308-7722 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.


P. AUSTIN BRADLEY
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2300

EAL
January 24, 2002